

Notice of Allowability

Application No.

10/537,536

Examiner

Brenda A. Lamb

Applicant(s)

DELAMARCHE ET AL.

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview summary of 9/26/2008. Drwgs filed 6/3/2005 are acceptable for exam purposes.
2. ☒ The allowed claim(s) is/are 1.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Herzberg on 9/26/2008.

The application has been amended as follows:

In the specification at page 10 line 29, at page 16 line 21 and at page 20 line 6 after "silicon, SU-8" delete ","; and

See the attached listing of the claim for changes to amended claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brenda A Lamb
Primary Examiner
Art Unit 1792

/Brenda A Lamb/

Primary Examiner, Art Unit 1792

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LISTING OF THE CLAIMS

CLAIMS

1. (Currently amended) A device for applying a liquid to a substrate surface, the device in
a body comprising:

~~a first~~ at least one first chamber for carrying the liquid;

~~a second~~ at least one second chamber for carrying the liquid;

a first aperture in the first chamber for communicating liquid from the first chamber to the
substrate surface via a first conduit having outer sides of limited wettability to the liquid;

a second aperture in the second chamber for communicating liquid from the second chamber
the substrate surface via a second conduit having outer sides of limited wettability to the liquid;

~~a body including~~ a protrusion defined by the outer sides of the first and second conduits, wherein
the body comprises a plane inner surface surrounding the protrusion and a plane outer surface
parallel to, offset from, and surrounding the inner surface, the protrusion extending from the
inner surface and having an end coplanar with the outer surface, wherein the end of the
protrusion is wettable by the liquid, and wherein the end of the protrusion comprises a flow
extending from the first aperture to the second aperture, wherein.

the first and second conduits comprise inner sides wettable by the liquid;

wherein the inner surface forms a peripheral recess surrounding the protrusion;

the outer surface is of limited wettability to the liquid;

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the first chamber has a first pressure for retaining the liquid when the flow path is remote from the substrate surface;

the second chamber has a second pressure such that the difference between the first and second pressures is oriented to promote flow of the liquid from the first chamber to the second chamber via the flow path in response to the flow path being located proximal to the substrate surface and the liquid in the device contacting the substrate surface;

the first and second pressures are such that the liquid is drawn towards at least the second chamber in response to withdrawal of the flow path from the substrate surface;

at least one of the first chamber and the second chamber comprises a capillary network for applying pressure to the liquid;

each capillary network comprises at least one of a plurality of parallel capillary members, a mesh, a porous material, and a fibrous material; and further comprising

a plurality of first chambers each coupled to the flow path;

a plurality of second chambers each coupled to the flow path, wherein:

the flow path has one of a curved cross section and a rectangular cross section;

the first and second pressures are such that the liquid is drawn towards the first chamber and the second chamber in response to withdrawal of the flow path from the substrate surface;

the second aperture surrounds the first aperture, and

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being of layered construction, wherein each layer is formed from one of polymer, glass, silicon, ~~SU-8~~, SU-8 photoresist, thermoplastic, metal, and ceramics.

2. - 27. (Canceled)

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